1. In a ventilated environment including at least a first room and a second room ventilated by a common source of supply air, the first room having drawn therefrom first return air that constitutes a first portion of air returned to the ventilated environment as at least some of the supply air, the second room having drawn therefrom second return air that constitutes a second portion of the air returned to the ventilated environment as at least some of the supply air, a method of controlling a level of at least one contaminant in the supply air, comprising an act of:

A) independently controlling at least one of a first flow of the first return air and a second flow of the second return air based at least on a contaminant level of the at least one contaminant in at least one of the first room and the second room.

2. The method of claim 1, wherein the act A) includes acts of:

B) determining a threshold value for the contaminant level of the at least one contaminant in at least one of the first room and the second room; and

C) independently controlling at least one of the first flow of the first return air and the second flow of the second return air based at least on a difference between the threshold value and the contaminant level of the at least one contaminant.

3. The method of claim 2, wherein the act B) includes an act of:

determining the threshold value for the contaminant level of the at least one contaminant based at least on a dilution ratio of at least one of the first flow of the first return air and the second flow of the second return air to an uncontaminated air flow associated with the supply air provided to the ventilated environment.

4. The method of claim 2, wherein the supply air includes at least fresh air, the first return air, and the second return air, and wherein the uncontaminated air flow represents at least a flow of the fresh air.

5. The method of claim 4, wherein the ventilated environment includes a plurality of rooms, wherein the supply air includes return air from at least some of the plurality of rooms, and wherein the uncontaminated air flow represents at least the flow

of the fresh air and a flow of initially uncontaminated return air from at least some of the plurality of rooms.

6. The method of claim 2, wherein the act C) includes an act of:

independently controlling at least one of the first flow of the first return air and the second flow of the second return air so as to independently satisfy a minimum ventilation requirement and a thermal load requirement for at least one of the first room and the second room if the contaminant level of the at least one contaminant is less than the threshold value.

7. The method of claim 2, wherein the act C) includes an act of:

reducing at least one of the first flow of the first return air and the second flow of the second return air if the contaminant level of the at least one contaminant exceeds the threshold value.

8. The method of claim 2, wherein the act C) includes an act of:

reducing a flow of the supply air to at least one of the first room and the second room if the contaminant level of the at least one contaminant exceeds the threshold value.

9. The method of claim 2, wherein the act C) includes an act of:

increasing a flow of exhaust air that is drawn from at least one of the first room and the second room and not returned to the ventilated environment if the contaminant level of the at least one contaminant exceeds the threshold value.

10. The method of claim 9, wherein the act C) further includes an act of:

maintaining unchanged a flow of the supply air to at least one of the first room and the second room if the contaminant level of the at least one contaminant exceeds the threshold value.

11. The method of claim 9, wherein the act C) further includes an act of:

reducing at least one of the first flow of the first return air and the second flow of the second return air if the contaminant level of the at least one contaminant exceeds the threshold value.

12. The method of claim 1, further including acts of:

B) sensing at least one of the first return air and the second return air to determine the contaminant level of the at least one contaminant; and

C) filtering at least one of the first return air and the second return air.

13. The method of claim 12, wherein:

the act C) precedes the act B); and

the act B) includes an act of sensing at least one of filtered first return air and filtered second return air.

14. The method of claim 1, wherein the act C) includes an act of selectively filtering at least one of the first return air and the second return air based on the contaminant level.

15. The method of claim 1, wherein the ventilated environment includes at least one first sensor to sense only the first return air and at least one second sensor to sense only the second return air, wherein the method further includes acts of:

sensing the first return air to determine a first contaminant level of the at least one contaminant in the first room; and

sensing the second return air to determine a second contaminant level of the at least one contaminant in the second room,

and wherein the act A) includes acts of:

controlling the first flow of the first return air based at least on the first contaminant level; and

controlling the second flow of the second return air based at least on the second contaminant level.

16. The method of claim 1, wherein the ventilated environment includes at least one sensor to sense at least the first return air and the second return air, and wherein the method further includes an act of:

B) sensing both of the first return air and the second return air at a single location using the at least one sensor to determine the contaminant level of the at least one contaminant.

17. The method of claim 16, wherein:

the act B) includes an act of sensing the first return air and the second return air in a multiplexed manner to determine a first contaminant level of the at least one contaminant in the first room and a second contaminant level of the at least one contaminant in the second room; and

the act A) includes acts of:

controlling the first flow of the first return air based at least on the first contaminant level; and

controlling the second flow of the second return air based at least on the second contaminant level.

18. A computer readable medium encoded with at least one program for execution on at least one processor associated with a ventilated environment including at least a first room and a second room ventilated by a common source of supply air, the first room having drawn therefrom first return air that constitutes a first portion of air returned to the ventilated environment as at least some of the supply air, the second room having drawn therefrom second return air that constitutes a second portion of the air returned to the ventilated environment as at least some of the supply air, the at least one program, when executed on the at least one processor, performing a method of controlling a level of at least one contaminant in the supply air, the method comprising an act of:

A) independently controlling at least one of a first flow of the first return air and a second flow of the second return air based at least on a contaminant level of the at least one contaminant in at least one of the first room and the second room.

19. A controller to control a level of at least one contaminant in a common source of supply air for a ventilated environment that includes at least a first room and a second room supplied by the supply air, the first room having drawn therefrom first return air that constitutes a first portion of air returned to the ventilated environment as at least some of the supply air, the second room having drawn therefrom second return air that constitutes a second portion of the air returned to the ventilated environment as at least some of the supply air, the controller independently controlling at least one of a first flow of the first return air and a second flow of the second return air based at least on a contaminant level of the at least one contaminant in at least one of the first room and the second room.

20. The controller of claim 19, wherein the controller includes at least a first input to receive a threshold value for the contaminant level of the at least one contaminant in at least one of the first room and the second room, wherein the controller includes a second input to receive the contaminant level, and wherein the controller independently controls at least one of the first flow of the first return air and the second flow of the second return air based at least on a difference between the threshold value and the contaminant level of the at least one contaminant.

21. The controller of claim 20, wherein the threshold value received at the first input is based at least on a dilution ratio of at least one of the first flow of the first return air and the second flow of the second return air to an uncontaminated air flow associated with the supply air provided to the ventilated environment.

22. The controller of claim 20, wherein the controller independently controls at least one of the first flow of the first return air and the second flow of the second return air so as to independently satisfy a minimum ventilation requirement and a thermal load requirement for at least one of the first room and the second room if the contaminant level of the at least one contaminant is less than the threshold value.

23. The controller of claim 20, wherein the controller reduces at least one of the first flow of the first return air and the second flow of the second return air if the contaminant level of the at least one contaminant exceeds the threshold value.

24. The controller of claim 20, wherein the controller reduces a flow of the supply air to at least one of the first room and the second room if the contaminant level of the at least one contaminant exceeds the threshold value.

25. The controller of claim 20, wherein the controller increases a flow of exhaust air that is drawn from at least one of the first room and the second room and not returned to the ventilated environment if the contaminant level of the at least one contaminant exceeds the threshold value.

26. The controller of claim 25, wherein the controller maintains unchanged a flow of the supply air to at least one of the first room and the second room if the contaminant level of the at least one contaminant exceeds the threshold value.

27. The controller of claim 25, wherein the controller reduces at least one of the first flow of the first return air and the second flow of the second return air if the contaminant level of the at least one contaminant exceeds the threshold value.

28. In a ventilated environment including at least a first room and a second room ventilated by a common source of supply air, the first room having drawn therefrom first return air that constitutes a first portion of air returned to the ventilated environment as at least some of the supply air, the second room having drawn therefrom second return air that constitutes a second portion of the air returned to the ventilated environment as at least some of the supply air, a method of determining a threshold value for a contaminant level of at least one contaminant in at least one of the first room and the second room, comprising acts of:

determining a dilution ratio of at least one of the first flow of the first return air and the second flow of the second return air to an uncontaminated air flow associated with the supply air provided to the ventilated environment; and

determining the threshold value for the contaminant level of the at least one contaminant based at least on the dilution ratio.

29. The method of claim 28, wherein the supply air includes at least fresh air, the first return air, and the second return air, and wherein the uncontaminated air flow represents at least a flow of the fresh air.

30. The method of claim 29, wherein the ventilated environment includes a plurality of rooms, wherein the supply air includes return air from at least some of the plurality of rooms, and wherein the uncontaminated air flow represents at least the flow of the fresh air and a flow of initially uncontaminated return air from at least some of the plurality of rooms.

31. In a ventilated environment including at least a first room and a second room, the first and second rooms being ventilated by a common source of supply air, a method for ventilating at least the first and second rooms, comprising an act of:

controlling a first flow of first return air drawn only from the first room based at least in part on a first air quality in at least the first room, the first return air constituting at least a first portion of the supply air supplied to at least the first and second rooms.

32. The method of claim 31, wherein the act of controlling a first flow of first return air further includes an act of controlling a second flow of second return air drawn only from the second room based at least in part on a second air quality in at least the second room, the second return air constituting at least a second portion of the supply air supplied to at least the first and second rooms.

33. The method of claim 31, wherein the act of controlling a second flow of second return air includes an act of independently controlling the second flow of the second return air such that the second flow of the second return air is controlled substantially independently of the first flow of the first return air.

34. A computer readable medium encoded with at least one program for execution on at least one processor associated with a ventilated environment including at least a first room and a second room, the first and second rooms being ventilated by a common source of supply air, the at least one program, when executed on the at least one processor, performing a method for ventilating at least the first and second rooms, the method comprising an act of:

controlling a first flow of first return air drawn only from the first room based at least in part on a first air quality in at least the first room, the first return air constituting at least a first portion of the supply air supplied to at least the first and second rooms.

35. The computer readable medium of claim 34, wherein the act of controlling a first flow of first return air further includes an act of controlling a second flow of second return air drawn only from the second room based at least in part on a second air quality in at least the second room, the second return air constituting at least a second portion of the supply air supplied to at least the first and second rooms.

36. The computer readable medium of claim 35, wherein the act of controlling a second flow of second return air includes an act of independently controlling the second flow of the second return air such that the second flow of the second return air is controlled substantially independently of the first flow of the first return air.

37. In a ventilated environment including at least a first room and a second room, the first and second rooms being ventilated by a common source of supply air, a ventilation system comprising:

a first return air flow device to control a first flow of first return air drawn only from the first room based at least in part on a first air quality in at least the first room, the first return air constituting at least a first portion of the supply air supplied to at least the first and second rooms.

38. The ventilation system of claim 37, further comprising:

a second return air flow device to control a second flow of second return air drawn only from the second room based at least in part on a second air quality in at least the second room, the second return air constituting at least a second portion of the supply air supplied to at least the first and second rooms.

5

39. The ventilation system of claim 38, further comprising a controller to control the first return air flow device and the second return air flow device such that the second flow of second return air is controlled substantially independently of the first flow of first return air.